

WHAT IS CLAIMED IS:

1. A motion controlled handheld device comprising:
  - a display having a viewable surface and operable to generate an image;
  - a motion detection module operable to detect motion of the device within three
  - 5 dimensions and to identify components of the motion in relation to the viewable surface, the components comprising a first component parallel to the viewable surface, a second component parallel to the viewable surface and perpendicular to the first component, and a third component perpendicular to the viewable surface;
  - a motion processing module operable to compare the components, to isolate a
  - 10 preferred one of the components based on the comparison, and to adjust a magnitude of the preferred component by an augmentation factor; and
  - a motion response module operable to modify the image based on the augmented preferred component.
- 15 2. The motion controlled handheld device of Claim 1, wherein:
  - the image displays a subsection of a larger image; and
  - the motion response module is further operable to continuously modify the image to display another subsection of the larger image based the augmented preferred component.
- 20 3. The motion controlled handheld device of Claim 1, wherein:
  - comparing the components comprises comparing magnitudes of the components; and
  - isolating the preferred one of the components based on the comparison
  - 25 comprises selecting the one of the components having a magnitude at least twice that of either of the other ones of the components.
- 30 4. The motion controlled handheld device of Claim 1, wherein a size of the augmentation factor is based on a current state of the device, the current state of the device including a type of application running on the device and a status of the application.

5. The motion controlled handheld device of Claim 1, wherein a size of the augmentation factor is based on a speed of the motion of the device.

6. The motion controlled handheld device of Claim 1, wherein:  
5 the image displays a subsection of a larger image; and  
a size of the augmentation factor is based on a relative size of the image as compared with the larger image.

7. The motion controlled handheld device of Claim 1, wherein the motion  
10 processing module is further operable to reduce magnitudes of ones of the components other than the preferred component.

8. The motion controlled handheld device of Claim 1, further comprising:  
a first accelerometer operable to detect acceleration along a first axis;  
15 a second accelerometer operable to detect acceleration along a second axis, the second axis perpendicular to the first axis; and  
a third accelerometer operable to detect acceleration along a third axis, the third axis perpendicular to the first axis and perpendicular to the second axis; and wherein  
20 the motion detection module is further operable to detect motion of the device using the first accelerometer, the second accelerometer, and the third accelerometer, the motion detection module further operable to distinguish between tilt of the device and translation of the device.

9. A method for controlling a handheld device comprising:  
detecting motion of the device within three dimensions;  
identifying components of the motion in relation to a viewable surface of the  
device, the components comprising a first component parallel to the viewable surface,  
5 a second component parallel to the viewable surface and perpendicular to the first  
component, and a third component perpendicular to the viewable surface;  
comparing the components;  
isolating a preferred one of the components based on the comparison;  
adjusting a magnitude of the preferred component by an augmentation factor;  
10 and  
modifying an image displayed on the viewable surface based on the  
augmented preferred component.

10. The method of Claim 9, wherein the image displays a subsection of a  
15 larger image, the method further comprising continuously modifying the image to  
display another subsection of the larger image based the augmented preferred  
component.

11. The method of Claim 9, wherein a size of the augmentation factor is  
20 based on a current state of the device, the current state of the device including a type  
of application running on the device and a status of the application.

12. The method of Claim 9, wherein a size of the augmentation factor is  
based on a speed of the motion of the device.

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13. The method of Claim 9, wherein:  
the image displays a subsection of a larger image; and  
a size of the augmentation factor is based on a relative size of the image as  
compared with the larger image.

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14. The method of Claim 9, further comprising reducing magnitudes of  
ones of the components other than the preferred component.

15. Logic for controlling a handheld device, the logic embodied in a computer readable medium and operable when executed to perform the steps of:

detecting motion of the device within three dimensions;

5 identifying components of the motion in relation to a viewable surface of the device, the components comprising a first component parallel to the viewable surface, a second component parallel to the viewable surface and perpendicular to the first component, and a third component perpendicular to the viewable surface;

comparing the components;

10 isolating a preferred one of the components based on the comparison;

adjusting a magnitude of the preferred component by an augmentation factor;

and

modifying an image displayed on the viewable surface based on the augmented preferred component.

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16. The logic of Claim 15, wherein the image displays a subsection of a larger image, the method further comprising continuously modifying the image to display another subsection of the larger image based the augmented preferred component.

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17. The logic of Claim 15, wherein a size of the augmentation factor is based on a current state of the device, the current state of the device including a type of application running on the device and a status of the application.

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18. The logic of Claim 15, wherein a size of the augmentation factor is based on a speed of the motion of the device.

19. The logic of Claim 15, wherein:

the image displays a subsection of a larger image; and

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a size of the augmentation factor is based on a relative size of the image as compared with the larger image.

20. The logic of Claim 15, further comprising reducing magnitudes of ones of the components other than the preferred component.

21. A motion controlled handheld device comprising:
- means for detecting motion of the device within three dimensions;
  - means for identifying components of the motion in relation to a viewable surface of the device, the components comprising a first component parallel to the
  - 5 viewable surface, a second component parallel to the viewable surface and perpendicular to the first component, and a third component perpendicular to the viewable surface;
  - means for comparing the components;
  - means for isolating a preferred one of the components based on the
  - 10 comparison;
  - means for adjusting a magnitude of the preferred component by an augmentation factor; and
  - means for modifying an image displayed on the viewable surface based on the augmented preferred component.